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EXAMINER
NGUYEN, ALLEN H

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/612,598	MEADOR ET AL.
	Examiner	Art Unit	
	Allen H. Nguyen	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>02 July 2003</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-27</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-27</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>02 July 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some.* c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>see attached</u>.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Information Disclosure Statement

1.   The information disclosure statement (IDS) submitted on 07/02/03 has been

considered by the examiner.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1, 3-4, 6-16, 18-23, 25-27 are rejected under 35 U.S.C. 102(b) as being

anticipated by Hasegawa et al. (US 5,666,191).

Regarding claim 1, Hasegawa '191 discloses a method of preventing

comprehension of a printed document, the method comprising:

feeding a printed document into a device having a printing mechanism (i.e., each

paper sheet P is fed into the information concealing printing unit 7 where the paper

sheet P is fed into the nip between the printing rollers 23, and the two sides of the paper

sheet are printed with image concealing patterns over the information already printed on

the paper sheet. As a result, the information concealing patterns are written over the

information already printed on the paper sheet, and make it totally unreadable; see col.
7, lines 46-53, and fig. 12, paper feed unit 1);

printing, with the printing mechanism over at least a portion of the printed

document to prevent comprehension of the printed document (i.e., device which can

render the information practically unreadable while allowing easy handling of the

processed sheets of paper or the like, a sheet printed information obliterating device

which requires relatively small space and little efforts for the processed or disposing

sheets of paper; see col. 1, lines 43-49).

Regarding claim 3, Hasegawa '191 discloses the method and further comprising:

scanning the printed document prior to printing over the printed document to

produce at least one of an image file and an electronic text file of the printed document

(i.e., the sheet printed information obliterating device may be conveniently incorporated

with a printer serving as an output unit of a computer, or a copier, in particular a digital

copier which electronically reads an original image and duplicates such an image

according to the electronic data obtained by electronically reading the original. By doing

so, the capability of the printer or the copier to form images can be used for the dual

purposes of obliterating information by covering it up with another image and printing

information supplied from a computer or an optical scanner; see col. 2, lines 58-67 and

col. 3, lines 1-2, and figs. 4-5);

identifying, based upon the at least one image file and electronic text file, which

portion of the printed document contains information to be obscured (i.e., the

information concealing pattern may consist of a repetition of a same letter or may

consist of a periodic or irregular repetition of a plurality of letters, or may even consist of

letters forming meaningful sentences; see col. 5, lines 18-21, and figs. 4, 5);

directing printing at least one ink and toner to the printed document to obfuscate

the identified information of the printed document (i.e., the optimum information

concealing pattern may vary depending on the way the information is printed on the

paper sheet, the printing material such as ink or the toner, and other factors, but

irregular stripe patterns and character patterns generally produce good results; see col.

5, lines 5-9, and fig. 1).

Regarding claim 4, Hasegawa '191 discloses the method wherein directing

printing of the at least one ink and toner comprises:

directing printing to at least one of:

a whitespace portion of the printed document (i.e., When the front side or the

reverse side of the paper sheet P is totally blank, and the corresponding image data

entirely consists of white data; see col. 7, lines 28-29, and fig. 1);

a text portion of the printed document (i.e., the factors which determines the

optimum information concealing pattern may include the kind of the letters or characters

expressing the information, the character pitch, the line spacing, and the arrangement of

the printed pattern; see col. 2, lines 53-57);

a graphics portion of the printed document (i.e., the information concealing

printing unit 7 in the sheet printed information obliterating device may also consist of

other types of printing devices including various printers such as wire dot printers,

thermal transfer printers, and ink jet printers, electro-photographic printers such as laser

beam printers, stencil printers and other printers, in addition to those employing rubber

stamp rollers impregnated with stamp ink; see col. 12, lines 44-52).

Regarding claim 6, Hasegawa '191 discloses the method and further comprising:

determining, based upon the image file, a first pattern of symbols in the printed

document (i.e., original reading means for reading image from the image carrying

surface of the sheet from which information is to be obliterated; see col. 2, lines);

building a second pattern of symbols with each symbol of the second pattern

selected to correspond to one or more symbols of the first pattern to obfuscate

comprehension of the first pattern of symbols of the printed document (i.e., information

concealing pattern generating means for generating an information concealing pattern

according to the image read by the original reading means; see col. 2, lines 49-52);

printing the second pattern of symbols on the printed document relative to the

first pattern of symbols on the printed document to prevent comprehension of the at

least one portion of the printed document (i.e., supplying the information concealing

pattern to the information concealing printing means; see col. 2, lines 52-53).

Regarding claim 7, Hasegawa '191 discloses the method wherein determining

the first pattern of symbols comprises:

determining a font of the first pattern of symbols of the printed document

including selecting at least one of a character font, a character size, a character

spacing, a line spacing, a paragraph spacing, and a margin spacing (i.e., it is also

possible to automatically distinguish and recognize the kind of letters and image

patterns used in the paper sheet for expressing the information with a pattern

recognition unit 105 according to the data obtained by the information reading unit 5,

and to select an information concealing pattern with an information concealing pattern

generating unit 106 from a font storage unit 120 according to the result of the

distinguishing and recognition process by the pattern recognition unit 105 so that an

optimum information concealing pattern may be selected according to the kind of letters

expressing the information, the line pitch and the character pitch, and may be supplied

to the printer 108; see col. 12, lines 60-67, and col. 13, lines 1-5, and fig. 13).

Regarding claim 8, Hasegawa '191 discloses the method wherein building the

second pattern of symbols comprises at least one of:

using a resident font of the printing mechanism of the device (i.e., a font storage

device for storing fonts; see fig. 13, font storage 120);

emulating the font of the printed document (i.e., therein and wherein said

information concealing pattern uses a font automatically selected from said font storage

device; see col. 12, lines 60-67; and col. 13, lines 1-5, and fig. 13).

Regarding claim 9, Hasegawa '191 discloses the method wherein directing printing comprises at least one of:

using at least one of following steps before shredding the printed document:

printing characters randomly in a white space portion of the printed document (i.e., the determination of the information concealing pattern by the manual setup mode can be made electronically by using a random number generator, and may be changed each day or each time a new file is created; see col. 18, lines 31-34);

randomly selecting characters and printing the selected characters as overstrikes on characters of the printed document (i.e., an optimum information concealing pattern may be selected according to the kind of letters expressing the information, the line pitch and the character pitch, and may be supplied to the printer 108; see col. 13, lines 2-5, and fig. 13);

selecting a character that complementarily obscures an identified character of the printed document and printing the selected character as an overstrike onto the identified character of the printed document (i.e., The information concealing pattern of the information concealing printing unit 7 may consist of any pattern suitable for concealing the information expressed by the characters, letters and other symbols printed on the paper sheet P such as a solid dark pattern, a halftone pattern, a fine geometric pattern, an irregular pattern, an irregular stripe pattern or characters or letters including a large number of lines, and of a size similar to the letter or the symbol to be concealed, which are arranged at a fine character pitch and at a small line spacing. The optimum information concealing pattern may vary depending on the way the information is

printed on the paper sheet, the printing material such as ink or the toner, and other

factors, but irregular stripe patterns and character patterns generally produce good

results. The characters or letters which may be used as the information concealing

pattern are preferred to be of the same kinds as the carrier of the information. For

instance, when the information to be concealed is expressed in Japanese, Japanese

characters and letters or, in other words, katakanas, hiraganas, and kanjis are

preferred. When the information to be concealed is expressed in English, Roman letters

are preferred as the patterns for concealing the information. The information concealing

pattern may consist of a repetition of a same letter or may consist of a periodic or

irregular repetition of a plurality of letters, or may even consist of letters forming

meaningful sentences; see col. 4, lines 63-67; col. 5, lines 1-21, and fig. 4);

selecting a negative image of an identified character of the printed document and

printing the negative image about the identified character of the printed document (i.e.,

an optimum information concealing pattern which makes the printed information most

unreadable by being printed thereon according to the information layout pattern, the

kind of letters, the line spacing, the character pitch and other factors; see col. 15, lines

51-55);

randomly selecting characters and printing strings of the selected characters at

randomly selected angles on the printed document (i.e., it is possible to determined if

the corner of the leading edge of each paper sheet is cut off in a triangular shape or not.

Thereby, it is possible to select specific sheets of paper from the paper sheets P

stacked up on the paper feed table 13, and activate the information reading unit 5 only

for those thus selected; see col. 9, lines 60-65, and figs 1, 8);

randomly selecting characters and printing the selected characters individually at

angles rotated relative to existing characters of the printed document (i.e., it is possible

to determined if the corner of the leading edge of each paper sheet is cut off in a

triangular shape or not. Thereby, it is possible to select specific sheets of paper from the

paper sheets P stacked up on the paper feed table 13, and activate the information

reading unit 5 only for those thus selected; see col. 9, lines 60-65, and figs 1, 8).

Regarding claim 10, Hasegawa '191 discloses 10. The method wherein printing

over the printed document further comprises:

directing printing at least one of ink and toner in at least one of (i.e., the optimum

information concealing pattern may vary depending on the way the information is

printed on the paper sheet, the printing material such as ink or the toner, and other

factors; see col. 5, lines 5-8):

a random pattern of individual pixels;

a random pattern of pixel clusters with each pixel cluster having at least one of a

randomly selected shape, a random selected color, a randomly selected intensity, a

randomly selected size, a randomly selected location on the printed document (i.e., the

information concealing pattern of the information concealing printing unit 7 may consist

of any pattern suitable for concealing the information expressed by the characters,

letters and other symbols printed on the paper sheet P such as a solid dark pattern, a

halftone pattern, a fine geometric pattern, an irregular pattern, an irregular stripe pattern

or characters or letters including a large number of lines, and of a size similar to the

letter or the symbol to be concealed, which are arranged at a fine character pitch and at

a small line spacing. The optimum information concealing pattern may vary depending

on the way the information is printed on the paper sheet, the printing material such as

ink or the toner, and other factors, but irregular stripe patterns and character patterns

generally produce good results; see col. 4, lines 63-67; col. 5, lines 1-9).

Regarding claim 11, Hasegawa '191 discloses the method wherein directing

printing of a random pattern of pixel clusters comprises driving the random pattern with

at least one of a linear geometric function, a non-linear geometric function, a repeating

function, and a non-repeating function (i.e., the information concealing pattern may

consist of a repetition of a same letter or may consist of a periodic or irregular repetition

of a plurality of letters, or may even consist of letters forming meaningful sentences; see

col. 5, lines 18-21).

Regarding claim 12, Hasegawa '191 discloses the method and further

comprising:

scanning the printed document prior to printing over the printed document to

produce at least one of an image file of the printed document (i.e., the images for

normal printing purpose can therefore be derived either from substantially permanent

data storage means or from images obtained by image scanning means; see col. 3,

lines 14-17);

identifying, based upon the image file, which portion of the printed document

contains information to be obscured (i.e., providing a sheet printed information

obliterating device, comprising information concealing printing means for printing an

information concealing pattern over a surface of a sheet carrying printed information;

see col. 1, lines 61-64);

directing printing of the at least one ink and toner to the identified portion of the

printed document (i.e., the optimum information concealing pattern may vary depending

on the way the information is printed on the paper sheet, the printing material such as

ink or the toner, and other factors; see col. 16, lines 9-12).

Regarding claim 13, Hasegawa '191 discloses the method wherein printing

comprises at least one of:

randomly selecting a plurality of content-free words and printing the selected

words in a non-grammatical order in a whitespace of the printed document with the

selected words printed in at least one of a repeating pattern and a non-repeating pattern

(i.e., the information concealing pattern may consist of a repetition of a same letter or

may consist of a periodic or irregular repetition of a plurality of letters, or may even

consist of letters forming meaningful sentences; see col. 16, lines 21-25);

selecting a plurality of content-free words and printing the selected words in a

grammatical order in whitespace of the printed document (i.e., the information

concealing pattern may consist of a repetition of a same letter or may consist of a

periodic or irregular repetition of a plurality of letters, or may even consist of letters

forming meaningful sentences; see col. 16, lines 21-25);

selecting at least one character and printing the at least one character as an

overstrike on top of an identified character in a word of the printed document (i.e., the

characters or letters which may be used as the information concealing pattern are

preferred to be of the same kind as the carrier of the information; see col. 16, lines 13-

16, and fig. 4);

printing a block of the at least one ink and toner over at least one of a selected

character, a selected word, a selected phrase, a selected line of text, and a selected

paragraph (i.e., the optimum information concealing pattern may vary depending on the

way the information is printed on the paper sheet, the printing material such as ink or

the toner, and other factors, but irregular stripe patterns and character patterns

generally produce good results; see col. 5, lines 5-9).

Regarding claim 14, Hasegawa '191 discloses the method wherein identifying

comprises:

identifying from the image file at least one graphic of the printed document and

selecting at least one of:

a blocking pattern including at least one of an irregular shaped blot out pattern, a

grid pattern, a cross-hatching pattern (i.e., the information concealing pattern of the

information concealing printing unit 7 may consist of any pattern suitable for concealing

the information expressed by the characters, letters and other symbols printed on the paper sheet P such as a solid dark pattern, a halftone pattern, a fine geometric pattern, an irregular pattern, an irregular stripe pattern or characters or letters including a large number of lines, and of a size similar to the letter or the symbol to be concealed, which are arranged at a fine character pitch and at a small line spacing; see col. 4, lines 63-67; col. 5, lines 1-5, and fig. 1);

a graphic manipulation pattern including at least one of mirror image of the graphic, a complementary image of the graphic, a rotated image of the graphic, a negative image of the graphic, and a scrambled image of the graphic (i.e., when various printers such as electro-photographic printers and other printers are used, a plurality of information concealing patterns may be stored in storage means, and they may be selectively used depending on the kind of letters expressing the information; see col. 12, lines 53-59).

Regarding claim 15, Hasegawa '191 discloses a document obfuscator comprising:

a printing mechanism configured to print at least one of an ink and a toner on a paper document (i.e., when an electrographic printer is used, the print image forming unit 103 and the printing unit 104 corresponding to a electrostatic latent image forming unit for a photosensitive drum and a transfer unit for developing a toner image of the electrographic printer, respectively; see col. 14, lines 18-25);

a memory (i.e., the information processing unit 7 consists of a computer including

a CPU 27, and comprises a program storage unit 31, an image processing unit 33, an

image storage unit 35, an image storing medium unit 37, a display control unit 39, a

time and date data generating unit 41, an information category data Generating unit 43,

a paper feed control unit 45 for controlling the operation of the automatic paper feed unit

1, and a printing control unit 47 for controlling the operation of the information

concealing printing unit 7, which are connected to one another by a bus line 29. The bus

line 29 is also electrically connected to the operation panel unit 11; see col. 5, lines 26-

37, and figs. 1, 2);

a obfuscation module stored in a memory and configured to cause the printing

mechanism to print the at least one ink and toner over at least a portion of a printed

document to obfuscate at least a portion of the printed document (i.e., the image

storage unit 35 is a buffer memory for storing image data corresponding to one sheet of

paper P, and includes a memory area for the data read out by the CCD line sensor 19

for the front side or for the information read out from the front side of the paper sheet,

and another memory area for the data read out by the CCD line sensor 21 for the

reverse side or for the information read out from the reverse side of the paper sheet.

When image data corresponding to one sheet of paper is stored in either one of the

memory areas or both of the memory areas, this image data is transferred to the

information storing medium unit 37 by the command from the CPU 27; see col. 5, lines

55-66, and fig. 2).

Regarding claim 16, Hasegawa '191 discloses the document obfuscator, further

comprising at least one of:

a scanner configured for obtaining an image file of the printed document (i.e., the

original reading unit 111 consists of an image scanner, and is provided with a line image

sensor 117 for reading the image of an original conveyed in a secondary scanning

direction, and an original feed roller 119; see col. 14, lines 33-36, and fig. 15, optical

scanner 111)

an optical character recognition module configured for converting the image file

into an electronic text file (i.e., the electric signal produced from the CCD line sensor 19

for the front side is amplified by an amplifier 49, and is converted into a digital signal by

an A/D converter 51, while the electric signal produced from the CCD line sensor 21 for

the reverse side is amplified by an amplifier 53, and is converted into a digital signal by

an A/D converter 55. These digital signals are supplied to the image processing unit 33;

see col. 5, lines 41-48, and fig. 2).

Regarding claim 18, Hasegawa '191 discloses the document obfuscator wherein

the obfuscation module comprises:

an overprint manager stored in the memory including:

a page analyzer configured for identifying at least one of an appearance and a

content of the printed document (i.e., the display control unit 39 carries out the control

action for displaying the information on read out data for the purpose of checking the

contents of the read out data, and displaying the information on the read out data for the

purpose of reproducing the image data stored in the information storing medium unit 37,

and is connected to a display 57 such as a CRT unit; see col. 6, lines 7-13, and fig. 2);

an overprint response selector configured for selecting a pattern of printing the at

least one ink and toner to obscured the appearance or content of the printed document

(i.e., the sheet printed information obliterating device may further comprise mode setting

means for selectively setting an information concealing mode, and normal print image

storage means for storing images for normal printing purpose; see col. 3, lines 3-6);

an automatic overwriter module configured for directing printing of the at least

one ink and toner independent of the appearance and content of the printed document

(i.e., , the information concealing printing means printing the information concealing

pattern on the information carrying surface of the sheet when the information concealing

mode is set up by the mode setting means, and printing normal print images on a

surface of a sheet when a mode different from the information concealing mode is set

up by the mode setting means; see col. 3, lines 7-13).

Regarding claim 19, Hasegawa '191 discloses the document obfuscator wherein

an array of symbols and patterns is stored in the memory and configured for selection

by the obfuscation module for printing over the printed document (i.e., the information

concealing pattern of the information concealing printing unit 7 may consist of any

pattern suitable for concealing the information expressed by the characters, letters and

other symbols printed on the paper sheet P such as a solid dark pattern, a halftone

pattern, a fine geometric pattern, an irregular pattern, an irregular stripe pattern or

characters or letters including a large number of lines, and of a size similar to the letter

or the symbol to be concealed, which are arranged at a fine character pitch and at a

small line spacing; see col. 4, lines 63-67; col. 5, lines 1-5, and fig. 12).

Regarding claim 20, Hasegawa '191 discloses the document obfuscator wherein

the overprint response selector comprises of:

a word manipulator configured for selecting a plurality of words, blackouts,

overstrike characters for overprinting onto at least one of a whitespace, a word, a

phrase, a line, a paragraph to obscure natural language word groupings of the printed

document (i.e., the information concealing pattern of the information concealing printing

unit 7 may consist of any pattern suitable for concealing the information expressed by

the characters, letters and other symbols printed on the paper sheet P such as a solid

dark pattern, a halftone pattern, a fine geometric pattern, an irregular pattern, an

irregular stripe pattern or characters or letters including a large number of lines, and of a

size similar to the letter or the symbol to be concealed, which are arranged at a fine

character pitch and at a small line spacing. The optimum information concealing pattern

may vary depending on the way the information is printed on the paper sheet, the

printing material such as ink or the toner, and other factors, but irregular stripe patterns

and character patterns generally produce good results. The characters or letters which

may be used as the information concealing pattern are preferred to be of the same

kinds as the carrier of the information; see col. 4, lines 63-67; col. 5, lines 1-12, and figs.

1, 4).

Regarding claim 21, Hasegawa '191 discloses a document obfuscator comprising:

means for printing at least one of an ink and a toner over at least one portion of a printed document (i.e., when an electrographic printer is used, the print image forming unit 103 and the printing unit 104 corresponding to a electrostatic latent image forming unit for a photosensitive drum and a transfer unit for developing a toner image of the electrographic printer, respectively; see col. 14, lines 21-25, and fig. 14);

means for determining a pattern of the at least one ink and the toner to be overprinted on the at least one portion of the printed document to obfuscate the printed document (i.e., the optimum information concealing pattern may vary depending on the way the information is printed on the paper sheet, the printing material such as ink or the toner, and other factors, but irregular stripe patterns and character patterns generally produce good results; see col. 16, lines 9-13).

Regarding claim 22, Hasegawa '191 discloses the document obfuscator comprising at least one of:

means for determining at least one of a content and an appearance of the printed document (i.e., the factors which determines the optimum information concealing pattern may include the kind of the letters or characters expressing the information, the character pitch, the line spacing, and the arrangement of the printed pattern; see col. 2, lines 53-57).

Regarding claim 23, Hasegawa '191 discloses the document obfuscator wherein the means for determining a pattern includes directing printing onto at least one of:

a whitespace portion of the printed document (i.e., When the front side or the reverse side of the paper sheet P is totally blank, and the corresponding image data entirely consists of white data; see col. 7, lines 28-30);

a text portion of the printed document (i.e., the information concealing pattern may consist of a repetition of a same letter or may consist of a periodic or irregular repetition of a plurality of letters, or may even consist of letters forming meaningful sentences; see col. 5, lines 18-21);

a graphics portion of the printed document (i.e., When various printers such as electrophotographic printers and other printers are used, a plurality of information concealing patterns may be stored in storage means, and they may be selectively used depending on the kind of letters expressing the information, the line pitch and the character pitch; see 12, lines 53-60).

Regarding claim 25, Hasegawa '191 discloses a printer driver comprising:

an overprint manager stored in a memory and including:

a page analyzer configured for identifying at least one an appearance and a content of a printed document (i.e., the display control unit 39 carries out the control action for displaying the information on read out data for the purpose of checking the contents of the read out data, and displaying the information on the read out data for the

purpose of reproducing the image data stored in the information storing medium unit 37,

and is connected to a display 57 such as a CRT unit; see col. 6, lines 7-13, and fig. 2);

an overprint response selector configured for selecting a pattern of printing of at

least one of an ink and a toner to obscure the appearance or content of the printed

document (i.e., the sheet printed information obliterating device may further comprise

mode setting means for selectively setting an information concealing mode, and normal

print image storage means for storing images for normal printing purpose; see col. 3,

lines 3-6);

an automatic overwriter module configured for directing printing of the at least

one ink and toner independent of the appearance and content of the printed document

(i.e., , the information concealing printing means printing the information concealing

pattern on the information carrying surface of the sheet when the information concealing

mode is set up by the mode setting means, and printing normal print images on a

surface of a sheet when a mode different from the information concealing mode is set

up by the mode setting means; see col. 3, lines 7-13).

Regarding claim 26, Hasegawa '191 discloses a computer readable medium

having computer-executable instructions for performing a method of obfuscating a

printed document, the method comprising:

identifying at least one portion of a printed document to be obscured (i.e.,

information concealing pattern generating means for generating an information

concealing pattern according to the image read by the original reading means, and

supplying the information concealing pattern to the information concealing printing

means. The factors which determines the optimum information concealing pattern may

include the kind of the letters or characters expressing the information, the character

pitch, the line spacing, and the arrangement of the printed pattern; see col. 2, lines 49-

57);

manipulating at least one of a symbol pattern, a character pattern, a word

pattern, a random pixel pattern, and an image pattern for printing onto at least one of a

whitespace portion, a text portion, and a graphics portion of the printed document to

obfuscate the identified portion of the printed document (i.e., the information concealing

pattern of the information concealing printing unit 7 may consist of any pattern suitable

for concealing the information expressed by the characters, letters and other symbols

printed on the paper sheet P such as a solid dark pattern, a halftone pattern, a fine

geometric pattern, an irregular pattern, an irregular stripe pattern or characters or letters

including a large number of lines, and of a size similar to the letter or the symbol to be

concealed, which are arranged at a fine character pitch and at a small line spacing; see

col. 4, lines 63-67; col. 5, lines 1-5).

Regarding claim 27, Hasegawa '191 discloses the medium wherein:

manipulating a symbol pattern includes selecting a second pattern of symbol

misinformation that confuses a first pattern of symbols of the printed document (i.e., the

information already printed on a paper sheet P can be obliterated and made unreadable

by printing an information concealing pattern thereover. The kanji "ura (meaning

"reverse" and having a relatively large number of lines therein)" is printed all over the

first page of this application, and this clearly shows how the information already printed

on a sheet of paper can be made unreadable by printing an information concealing

pattern thereover; see col. 7, lines 55-62, and fig. 4);

manipulating a character pattern includes selecting a plurality of characters for

overprinting onto at least one of the whitespace portion and an at least one character of

text portion of the printed document (i.e., the information concealing printing unit 7 may

consist of any pattern suitable for concealing the information expressed by the

characters, letters and other symbols printed on the paper sheet P such as a solid dark

pattern, a halftone pattern, a fine geometric pattern, an irregular pattern, an irregular

stripe pattern or characters or letters including a large number of lines, and of a size

similar to the letter or the symbol to be concealed, which are arranged at a fine

character pitch and at a small line spacing; see col. 4, lines 63-67; col. 5, lines 1-5);

manipulating a word pattern includes selecting a plurality of words, blackouts,

overstrike characters for overprinting onto at least one of the whitespace portion, a word

of the text portion, a phrase of the text portion, a line of the text portion, a paragraph of

the text portion to obscure natural language word groupings of the text portion of the

printed document (i.e., The information concealing pattern may consist of a repetition of

a same letter or may consist of a periodic or irregular repetition of a plurality of letters, or

may even consist of letters forming meaningful sentences; see col. 5, lines 18-20);

manipulating a pixel pattern includes selecting at least one of a plurality of

individual pixels and a plurality of pixel clusters for overprinting onto the printed

document (i.e., the information concealing pattern of the information concealing printing

unit 7 may consist of any pattern suitable for concealing the information expressed by

the characters, letters and other symbols printed on the paper sheet P such as a solid

dark pattern, a halftone pattern, a fine geometric pattern, an irregular pattern, an

irregular stripe pattern or characters or letters including a large number of lines, and of a

size similar to the letter or the symbol to be concealed, which are arranged at a fine

character pitch and at a small line spacing; see col. 4, lines 63-67; col. 5, lines 1-5);

manipulating an image pattern includes selecting at least one of a blackout

pattern and a confusing image pattern for overprinting onto the graphic portion of the

printed document to obfuscate the printed document (i.e., the information concealing

pattern of the information concealing printing unit 7 may consist of any pattern suitable

for concealing the information expressed by the characters, letters and other symbols

printed on the paper sheet P such as a solid dark pattern, a halftone pattern, a fine

geometric pattern, an irregular pattern, an irregular stripe pattern or characters or letters

including a large number of lines, and of a size similar to the letter or the symbol to be

concealed, which are arranged at a fine character pitch and at a small line spacing; see

col. 4, lines 63-67; col. 5, lines 1-5).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 2, 5, 17, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US 5,666,191) in view of Whaley (US 2003/0004607).

Regarding claim 2, Hasegawa '191 does not explicitly show the method and further comprising: shredding the printed document after printing over the printed document.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Whaley '607. In particularly, Whaley '607 teaches the method comprising: shredding the printed document after printing over the printed document (i.e., stapling device 212 receives sheets of paper from printer 202 and passes the paper through a media stapler 214, which is capable of stapling together multiple sheets of paper or other media; see page 3, paragraph [0032], and fig. 2, Stapling Device 200).

In view of the above, having the system of Hasegawa '191 and then given the well-established teaching of Whaley '607, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Hasegawa '191 as taught by Whaley '607, since Whaley '607 stated on page 1, paragraph [0003] that such a modification would illustrate a printer with a built-in stapling device.

Regarding claim 5, Hasegawa '191 does not disclose the method comprising: shredding the obfuscated printed document.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Whaley '607. In particularly, Whaley '607 teaches the method comprising: shredding the obfuscated printed document (i.e., stapling device 212 receives sheets of paper from printer 202 and passes the paper through a media stapler 214, which is capable of stapling together multiple sheets of paper or other media; see page 3, paragraph [0032], and fig. 2, Stapling Device 200).

In view of the above, having the system of Hasegawa '191 and then given the well-established teaching of Whaley '607, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Hasegawa '191 as taught by Whaley '607, since Whaley '607 stated on page 1, paragraph [0003] that such a modification would illustrate a printer with a built-in stapling device.

Regarding claim 17, Hasegawa '191 does not disclose the document obfuscator and further comprises:

a shredder incorporated into the document obfuscator.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Whaley '607. In particularly, Whaley '607 teaches the document obfuscator and further comprises:

a shredder incorporated into the document obfuscator (i.e., an exemplary printer 202 and a stapling device 212 coupled to the printer; see page 2, paragraph [0030], and fig. 2).

In view of the above, having the system of Hasegawa '191 and then given the well-established teaching of Whaley '607, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Hasegawa '191 as taught by Whaley '607, since Whaley '607 stated on page 1, paragraph [0003] that such a modification would illustrate a printer with a built-in stapling device.

Regarding claim 24, Hasegawa '191 does not disclose the document obfuscator and further comprising:

means for mechanically separating the printed document into a plurality of document particles.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Whaley '607. In particularly, Whaley '607 shows the document obfuscator and further comprising:

means for mechanically separating the printed document into a plurality of document particles (i.e., a device to cut an arbitrary shape in the printed sheets; see page 1, paragraph [0030], and fig. 2).

In view of the above, having the system of Hasegawa '191 and then given the well-established teaching of Whaley '607, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Hasegawa '191 as taught by Whaley '607, since Whaley '607 stated on page 1,

paragraph [0003] that such a modification would illustrate a printer with a built-in stapling device.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

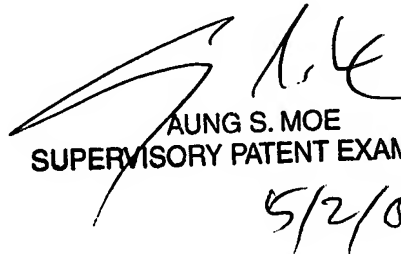Cobben et al. (US 6,739,627) discloses security feature comprising a perforation pattern.

Chang et al. (US 2003/0006330) discloses paper shredder having the function of breaking a compact disc.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen H. Nguyen whose telephone number is 571-270-1229. The examiner can normally be reached on M-F from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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5/2/07

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